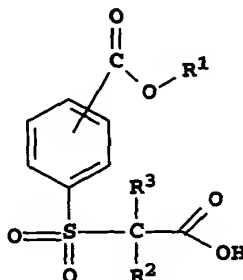


WHAT IS CLAIMED IS:

1. A composition comprising a base precursor that is the salt of an organic base with an arylsulfonylacetic acid having the following structure:



wherein the group R¹ represents a substituted or unsubstituted alkyl group, cycloalkyl group, aralkyl group, aryl group or heterocyclic group;

each of R² and R³ is independently a monovalent group;

said base precursor being further in association with a photographically useful compound.

2. The composition of claim 1 wherein said monovalent group is selected from the group consisting of hydrogen, an alkyl group, an alkenyl group, a cycloalkyl group, an aralkyl group, an aryl group and a heterocyclic group, wherein each of the monovalent groups may have one or more substituent groups.

3. The composition of claim 1 wherein the photographically useful compound is a filter dye and wherein the base precursor is capable of bleaching the filter dye, thereby forming a composition that is useful as a thermally bleachable dye composition, wherein said arylsulfonylacetic acid undergoes decarboxylation at a temperature of 50 to 200°C and will form a carbanion that is capable of abstracting a hydrogen from the organic base, rendering the organic base effective as a bleaching agent for said dye.

4. The composition of claim 1 wherein the photographically useful compound is blocked, and the base precursor is capable of promoting the unblocking of the compound.

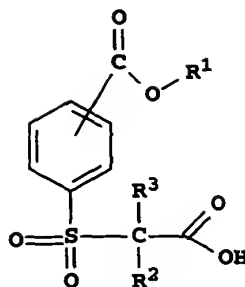
5. The composition of claim 4 wherein the blocked photographically useful compound is selected from the group consisting of couplers, development inhibitors, bleach accelerators, bleach inhibitors, inhibitor releasing developers, dye precursors, developing agents, electron transfer agents, silver halide solvents, silver halide complexing agents, reductones, image toners, pre-processing or post-processing image stabilizers, hardeners, or precursors thereof.

6. The composition of claim 1 wherein each of R^2 and R^3 is independently hydrogen, an alkyl group and an aryl group.

7. The composition of claim 1 wherein both R^2 and R^3 represent hydrogen.

8. The composition of claim 2 wherein each of the alkyl groups preferably has 1 to 8 carbon atoms.

9. A photothermographic element comprising a support having thereon at least one light-sensitive imaging layer and at least one layer comprising an effective amount of a base precursor comprising the salt of an organic base with an arylsulfonylacetic acid having the following structure:



wherein the group R^1 represents a substituted or unsubstituted alkyl group, cycloalkyl group, aralkyl group, aryl group or heterocyclic group;
each of R^2 and R^3 is independently a monovalent group;
said base precursor being further in association with a photographically useful compound.

10. The photothermographic element of claim 9 wherein said base precursor is in bleaching association with a filter dye.

11. The photothermographic element of claim 10 wherein said filter dye and said base precursor are both in a light-absorbing layer comprising said filter dye.

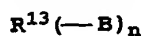
12. The photothermographic element of claim 9 wherein said base precursor is in association with one or more blocked photographically useful compounds and the base precursor is capable of promoting the unblocking of said one or more compounds.

13. The photothermographic element of claim 10 wherein the dye is a barbituric acid arylidene filter dye.

14. The photothermographic element of claim 9 wherein the base precursor reacts with the photographically useful group at a temperature suitable for photothermographic development or below but higher than 80°C.

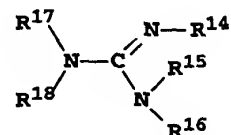
15. The photothermographic element of claim 9 wherein the base precursor that is a neutral or weakly basic compound which can generate a strong base during thermal processing.

16. The photothermographic element of claim 9 wherein the organic base is a diacidic to tetraacidic base having the following Structure:



wherein R^{13} is an n-valent residue of a hydrocarbon or heterocyclic ring, each of which may have one or more substituent groups; "n" is an integer of 2 to 4;

and wherein "B" is a monovalent group corresponding to an atomic group formed by removing one hydrogen atom from an guanidine having the Structure:



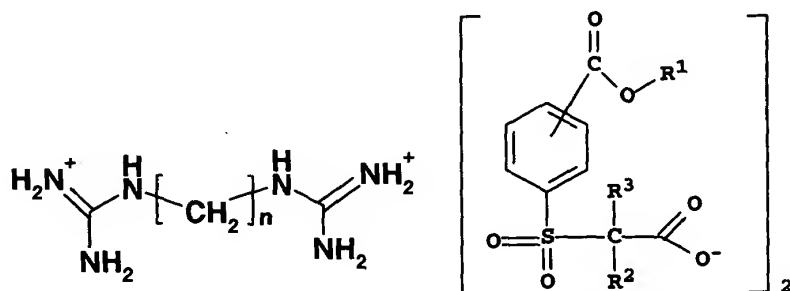
wherein each of R^{14} , R^{15} , R^{16} , R^{17} and R^{18} are independently a monovalent group such as hydrogen, an alkyl group, an alkenyl group, an alkynyl group, a cycloalkyl group, an aralkyl group, an aryl group and a heterocyclic group, wherein each of the monovalent groups may have one or more substituent groups; or any two of R^{14} , R^{15} , R^{16} , R^{17} and R^{18} may be combined together to form a five-membered or six-membered nitrogen containing heterocyclic ring.

17. The photothermographic element of claim 16 wherein each of R^{14} , R^{15} , R^{16} , R^{17} and R^{18} is hydrogen or an alkyl group.

18. The photothermographic element of claim 17 wherein the number of the guanidine moieties is 2.

19. The photothermographic element of claim 9 wherein the base precursor is a bisguanidine base precursor.

20. The photothermographic element of claim 9 wherein the base precursor is a bisguanidinium salts of arylsulfonylacetic acids having the following formula:



IV

wherein the subscript n is 2 to 4.

21. The photothermographic element of claim 9 comprising a support having thereon at least one light-sensitive silver halide emulsion layer and at least one light-absorbing non-light sensitive layer comprising said photographically useful group.

22. The photothermographic element of claim 21 in which the base precursor is present in the amount of 0.25 times to 1.0 times the amount by weight of coated gelatin per square meter in the light-absorbing layer or in a proximate layer containing base precursor in bleaching association with the light-absorbing layer.

23. The photothermographic element of claim 22 wherein said photographically useful group is a filter dye that becomes at least about 50% colorless within about 5 minutes upon heating to a temperature of at least about 90°C.

24. A photothermographic element according to claim 9 wherein the photothermographic element contains an imaging layer comprising a blocked developer, a light-sensitive silver halide emulsion, and a non-light sensitive silver salt oxidizing agent.

25. A photothermographic element according to claim 9 that is capable of dry development without the application of aqueous solutions.

26. A photothermographic process for preparing visible photographic images comprising the steps of:

(a) providing a photothermographic element comprising a support having coated thereon (i) at least one layer containing photosensitive silver halide, a water-insoluble organic silver salt as an oxidizing agent, a reducing agent for silver ion, and (ii) a light-absorbing layer comprising a filter dye in association with an effective amount of a base precursor according to claim 1; and

(b) thermally developing the film step without any externally applied developing agent, comprising heating said film to an average temperature of at least 90°C for at least 0.5 seconds, wherein said antihalation dye becomes at least about 50% colorless.

27. The photothermographic process according to claim 26 wherein thermal development is conducted under substantially dry process conditions without the application of aqueous solutions.

28. The photothermographic process of claim 26 wherein said filter layer becomes substantially colorless within 2 minutes upon heating to a temperature of at least 90°C.

29. The photothermographic process according to claim 26, wherein said development step comprises treating said imagewise exposed element at a temperature between about 100°C and about 180°C for a time ranging from about 0.5 to about 60 seconds.

30. The photothermographic process according to claim 26 wherein following thermal development the element is scanned to form a first electronic image representation of the developed image in the element and an image is formed on another recording material based on the image information.